

# इंटरनेट

# मानक

## Disclosure to Promote the Right To Information

Whereas the Parliament of India has set out to provide a practical regime of right to information for citizens to secure access to information under the control of public authorities, in order to promote transparency and accountability in the working of every public authority, and whereas the attached publication of the Bureau of Indian Standards is of particular interest to the public, particularly disadvantaged communities and those engaged in the pursuit of education and knowledge, the attached public safety standard is made available to promote the timely dissemination of this information in an accurate manner to the public.

“जानने का अधिकार, जीने का अधिकार”

Mazdoor Kisan Shakti Sangathan

“The Right to Information, The Right to Live”

“पुराने को छोड़ नये के तरफ”

Jawaharlal Nehru

“Step Out From the Old to the New”

IS 11694-3 (1986): single-lock automatic couplings for push  
tows for inland navigation, Part 3 Type B couplings [TED  
18: Inland, Harbour Crafts and Fishing Vessels]



“ज्ञान से एक नये भारत का निर्माण”

Satyanarayan Gangaram Pitroda

“Invent a New India Using Knowledge”



“ज्ञान एक ऐसा खजाना है जो कभी चुराया नहीं जा सकता है”

Bhartrhari—Nitiśatakam

“Knowledge is such a treasure which cannot be stolen”



BLANK PAGE





Indian Standard

# SPECIFICATION FOR SINGLE-LOCK AUTOMATIC COUPLINGS FOR PUSH TOWS FOR INLAND NAVIGATION

## PART 3 TYPE B COUPLINGS

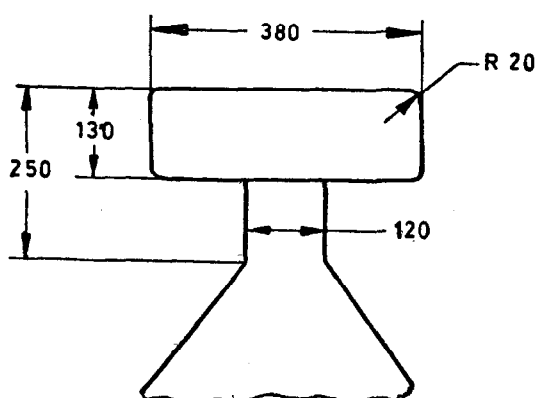
### 1. Scope

1.1 This standard specifies the main dimensions and other requirements for Type B single-lock automatic couplings intended for a bow-to-stern connection of inland vessels in push tows, navigating in waters with a wave height of not more than 2 m.

1.2 This standard does not cover side couplings.

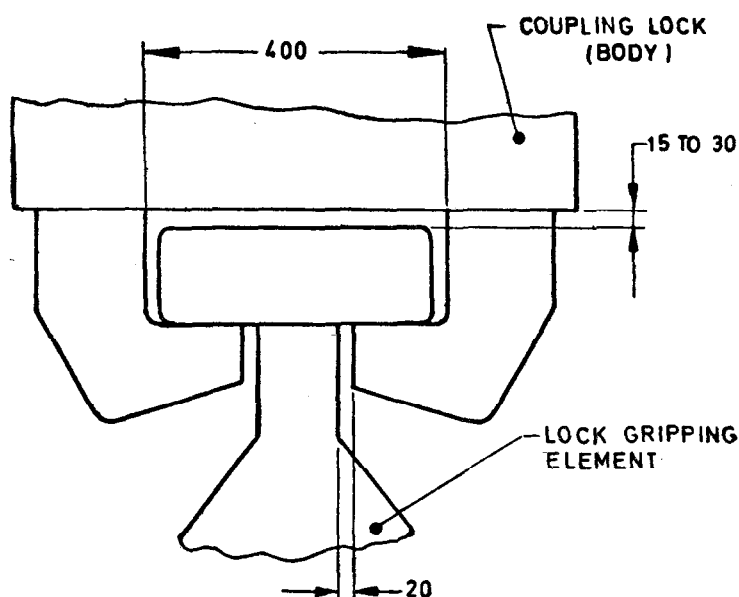
### 2. Dimensions

2.1 The coupling beam profile shall be as given in Fig. 1.



All dimensions in millimetres.  
FIG. 1 COUPLING BEAM PROFILE

2.2 The connection of lock with coupling beam shall be as given in Fig. 2.



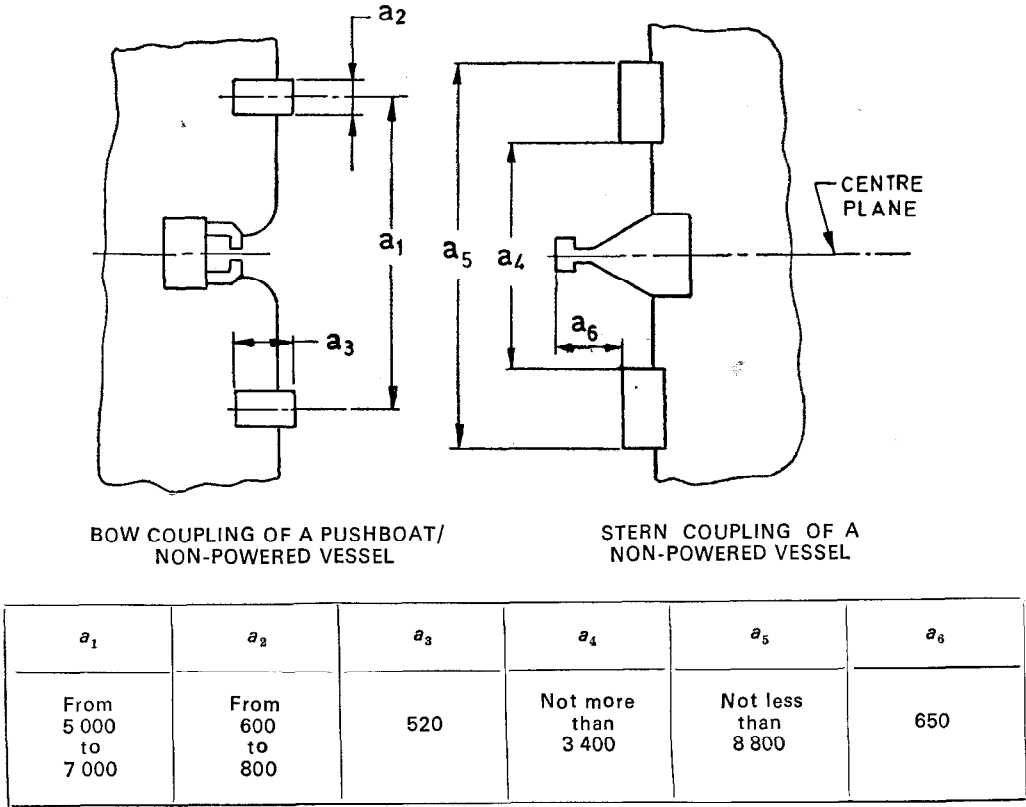
All dimensions in millimetres.  
FIG. 2 CONNECTION OF LOCK WITH COUPLING BEAM

Adopted 7 August 1986

© February 1987, ISI

Gr 2

2.3 The mating dimensions of couplings shall be as given in Fig. 3.



**Note** — The dimensions  $a_1$ ,  $a_2$  and  $a_4$  may be proportionately increased with the design stress increase.  
All dimensions in millimetres.

FIG. 3 MATING DIMENSIONS OF COUPLINGS

3. General Requirements

3.1 An additional reserve height  $h = 1\,000\text{ mm}$  of the coupling beam and the rest elements as indicated in Fig. 4 shall be provided.

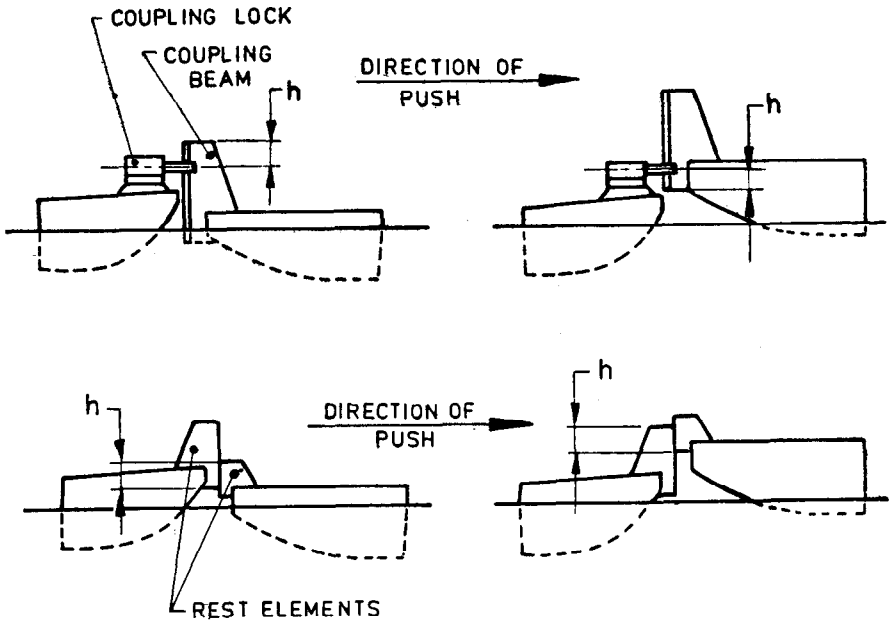


FIG. 4 HEIGHT RESERVES ( $h$ ) OF COUPLING ELEMENTS

**3.2** The possible ranges of the distance between the axis of the coupling lock and the water are as follows:

- a) On non-powered vessels      2'7 to 6'0 m
- b) On pushboats                      2'4 to 4'0 m

**3.2.1** The indicated ranges are chosen when designing the couplings depending on the depth and draught of the vessels forming push tows of the assigned tonnage.

**Note** — The draughts of the pushboats and of the non-powered vessel shall be taken with tanks full and fully-laden respectively.

**3.3** A positional adjustment of the coupling lock ( or its gripping elements ) in the vessel length shall be provided for in the couplings. The ranges of adjustment in relation to the initial mounting position of the couplings shall be 60 to 120 m fore and aft.

**3.4** The couplings shall be fitted with a coupling lock whose gripping elements are designed for coupling with the coupling beam having the profile shown in Fig. 1.

**3.5** To provide for natural oscillations of the lock along the coupling beam, heel ( up to 0'175 rad ) and trim ( up to 0'09 rad ) clearances between the surfaces of the coupling beam and the gripping elements shall be provided, their values being as indicated in Fig. 1 and 2.

**3.6** The couplings shall meet all other requirements as laid down in IS : 11694 ( Part 1 ) - 1986 'Specification for single-lock automatic couplings for push tows for inland navigation: Part 1 General requirements'.

## EXPLANATORY NOTE

This standard lays down the types, materials and requirements of the single-lock automatic couplings intended for bow-to-stern connection of vessels in push tows. The waters where these couplings are being employed should not experience a wave height of not more than 2 m. This part of the standard lays down the specific requirements of Type B couplings. This standard is being issued in the following three parts:

- Part 1 General requirements
- Part 2 Type A couplings
- Part 3 Type B couplings

While preparing this standard, considerable assistance has been derived from ISO 7545-1983 'Shipbuilding and marine structures — Inland navigation — Single lock automatic couplings for push tows' issued by the International Organization for Standardization (ISO).